



PTO/SB/21 (08-00)

Please type a plus sign (+) inside this box → ☒

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Application Number	09/739,168
Filing Date	December 18, 2000
First Named Inventor	Budge et al.
Group Art Unit	2621
Examiner Name	H. Akhavannik
Attorney Docket Number	1423-4202.1US

ENCLOSURES (check all that apply)

- ☒ Postcard receipt acknowledgment
(attached to the front of this
transmittal)
- ☒ Duplicate copy of this transmittal
sheet in the event that additional
filing fees are required under
37 C.F.R. § 1.16
- ☐ Preliminary Amendment
- ☐ Response to Restriction
Requirement/Election of Species
Requirement dated
- ☒ Amendment in response to office
action dated June 16, 2004
- ☐ Amendment under 37 C.F.R. §
1.116 in response to final office
action dated
- ☒ Additional claims fee - Check No.
7142 in the amount of \$100.00
- ☐ Letter to Chief Draftsman and copy
of FIGS. with changes made
in red
- ☐ Transmittal of Formal Drawings
- ☐ Formal Drawings (sheets)

- ☐ Information Disclosure Statement,
PTO/SB/08A; ☐ copy of cited
references
- ☒ Supplemental Information Disclosure
Statement; PTO/SB/08A; copy of cited
references and Check No. 7133 in the
amount of \$180.00
- ☐ Associate Power of Attorney
- ☒ Petition for Extension of Time and
Check No. 7141 in the amount of
\$510.00
- ☐ Petition
- ☐ Fee Transmittal Form
- ☐ Certified Copy of Priority Document(s)
- ☐ Assignment Papers (for an Application)

- ☐ Terminal Disclaimer
- ☐ Terminal Disclaimer
- ☐ Terminal Disclaimer
- ☐ Other Enclosure(s)
(please identify below):

Remarks

The Commissioner is authorized to charge any additional fees required but not
submitted with any document or request requiring fee payment under 37 C.F.R. §§
1.16 and 1.17 to Deposit Account 20-1469 during pendency of this application.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENTFirm or
Individual name

Jeff M. Michelsen

Registration No. 50,978

Signature

Date

December 16, 2004

CERTIFICATE OF MAILINGExpress Mail Label Number: EL 994822268 USDate of Deposit: December 16, 2004Person Making Deposit: Steve Wong

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Budge et al.

Serial No.: 09/739,168

Filed: December 18, 2000

For: METHOD FOR IMAGING CODING
BY RATE-DISTORTION ADAPTIVE
ZERO-TREE-BASED RESIDUAL VECTOR
QUANTIZATION AND SYSTEM FOR
EFFECTING SAME

Confirmation No.: 3993

Examiner: H. Akhavannik

Group Art Unit: 2621

Attorney Docket No.: 1423-4202.1US

NOTICE OF EXPRESS MAILING

Express Mail Mailing Label Number: EL 994822268 US

Date of Deposit with USPS: December 16, 2004

Person making Deposit: Steve Wong

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In compliance with the duty to disclose information material to patentability pursuant to 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 or PTO/SB/08 be considered by the Examiner and made of record. Copies of the listed documents are enclosed pursuant to 37 C.F.R. § 1.98(a).

In accordance with 37 C.F.R. § 1.97(g) and (h), filing of this Information Disclosure Statement is not to be construed as a representation that a search has been made or an admission

that the information cited herein is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b). Further, no representation is made by Applicants herein that no other possible material information as defined in 37 C.F.R. § 1.56 (b) exists.

U.S. Patent Documents

<u>U.S. Patent No.</u>	<u>Publication Date</u>	<u>Patentee</u>
US - 6,134,350	10-17-2000	Beck
US - 6,236,757 B1	05-22-2001	Zeng et al.

Other Documents

M. ANOTONINI ET AL., "Image Coding using wavelet transform", IEEE Transactions on Image Processing, vol. 1, no. 2, pp. 205-220

J.M. SHAPRIO, "Embedded image coding using zerotree of wavelet coefficients," IEEE Transactions on Signal Processing, vol. 41, pp. 3445-3462, December 1993

P.C. COSSMAN ET AL., "Tree-Structured vector quantizaation with significance map for wavelet image coding", Proc. 1995 IEEE Data Compression Conf. (DCC), March 1995

A.R. CALDERBANK ET AL., "Wavelet transforms that map integers to integers", Mathematics Subject Classification, August 1996

M.J. GORMISH ET AL., "Lossless and nearly lossless compression for high quality images", Tech. Rep. Ricoh California Research Center, 2882 Sand Hill Road, Suite 115, Menlo Park, CA 94025-7022

QUN GU, "Image Coding by Rate-Distortion Adaptive Zerotree-based Residual Vector Quantization (2000) (published Master of Science (M.S.) thesis, Utah State University, Logan, Utah on file with the Utah State University Library)

I. DEBAUCHIES ET AL., "Factoring wavelet transform into lifting steps", Tech. Rep. Lucent, Bell Laboratories, 1996

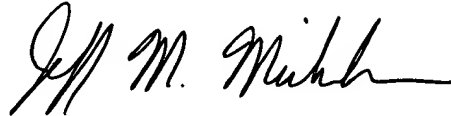
D. SAMPSON ET AL., "Wavelet transform image coding using lattice vector quantization", Electronics Letter, vol. 30, pp. 1477-78, September 1994

Applicants offer to supply any explanation or discussion of the documents which the Examiner feels is necessary or desirable and which is requested.

This Information Disclosure Statement is filed after the mailing date of the first Office Action on the merits.

The fee pursuant to 37 C.F.R. § 1.17(p) is enclosed.

Respectfully submitted,

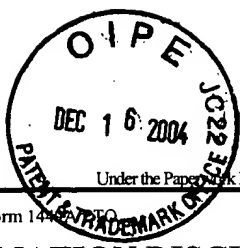


Jeff M. Michelsen
Registration No. 50,978
Attorney for Applicant(s)
TRASKBRITT
P.O. Box 2550
Salt Lake City, Utah 84110-2550
Telephone: 801-532-1922

Date: December 16, 2004
JMM/rmh

Enclosures: Form PTO-1449 or PTO/SB/08
Copy of documents cited
Check No. 7133 in the amount of \$180.00

Document in ProLaw



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	1	of	2
-------	---	----	---

Complete if Known

Application Number	09/739,168
Filing Date	December 18, 2000
First Named Inventor	Budge et al.
Group Art Unit	2621
Examiner Name	H. Akhavannik
Attorney Docket Number	1423-4202.1US

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 2 of 2

Complete if Known

Application Number	09/739,168
Filing Date	December 18, 2000
First Named Inventor	Budge et al.
Group Art Unit	2621
Examiner Name	H. Akhavannik
Attorney Docket Number	1423-4202.1US

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		M. ANOTONINI ET AL., "Image Coding using wavelet transform", IEEE Transactions on Image Processing, vol. 1, no. 2, pp. 205-220	
		J.M. SHAPRIO, "Embedded image coding using zerotree of wavelet coefficients," IEEE Transactions on Signal Processing, vol. 41, pp. 3445-3462, December 1993	
		P.C. COSSMAN ET AL., "Tree-Structured vector quantization with significance map for wavelet image coding", Proc. 1995 IEEE Data Compression Conf. (DCC), March 1995	
		A.R. CALDERBANK ET AL., "Wavelet transforms that map integers to integers", Mathematics Subject Classification, August 1996	
		M.J. GORMISH ET AL., "Lossless and nearly lossless compression for high quality images", Tech. Rep. Ricoh California Research Center, 2882 Sand Hill Road, Suite 115, Menlo Park, CA 94025-7022	
		QUN GU, "Image Coding by Rate-Distortion Adaptive Zerotree-based Residual Vector Quantization (2000) (published Master of Science (M.S.) thesis, Utah State University, Logan, Utah on file with the Utah State University Library)	
		I. DEBAUCHIES ET AL., "Factoring wavelet transform into lifting steps", Tech. Rep. Lucent, Bell Laboratories, 1996	
		D. SAMPSON ET AL., "Wavelet transform image coding using lattice vector quantization", Electronics Letter, vol. 30, pp. 1477-78, September 1994	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.